

CCH RESOURCES LTD.

ASSESSMENT REPORT

REGIONAL GEOCHEMICAL SURVEY

PB 1-2, AG 1-14, Jo, John, Middlecoff,  
Lowell, etc.

105 - M - 13

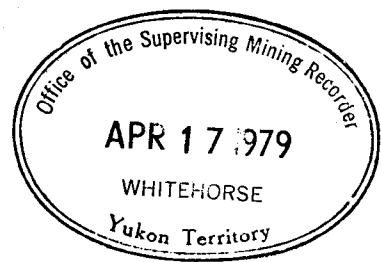
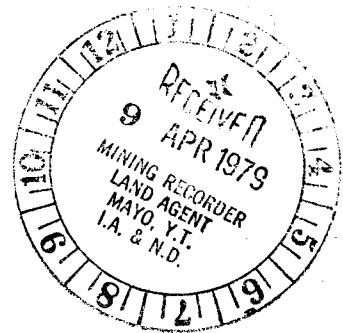


63° 52'  
MAYO AREA

135° 52'  
YUKON TERRITORY

090452  
Vancouver,  
March 28, 1979

A. Woodsend  
Senior Geologist



## CONTENTS

INTRODUCTION	Page 1
EXPLORATION HISTORY	1
GENERAL GEOLOGY	2
GEOCHEMICAL METHODS	3
GEOCHEMICAL RESULTS	4
RECOMMENDATIONS	10
STATEMENT OF QUALIFICATIONS	11
STATEMENT OF EXPENDITURES	12

### ATTACHED

SKETCH MAP OF CLAIMS	½ MILE TO 1"
SAMPLE LOCATION MAP	1:10,000

INTRODUCTION

The PB and AG claims are owned by B. Way, and the Jo, John, Middlecoff, Lowell, etc. claims are owned by H. Ewing of Mayo.

The claims are registered at the mining records office in Mayo, Y.T., as follows:

<u>CLAIM NAME</u>	<u>GRANT NUMBERS</u>	<u>EXPIRY DATE</u>
Middlecoff	YA 1913	20 April, 1979
Lowell	YA 1914	20 April, 1979
John	YA 1915	20 April, 1979
Jo	YA 1916	20 April, 1979
Gopher	YA 17722	10 April, 1979
Whistler	YA 17723	10 April, 1979
Ricky	YA 17724	10 April, 1979
Dawn	YA 17725	10 April, 1979
Mike	YA 17726	10 April, 1979
Andy	YA 17727	10 April, 1979
Pb 1-2	YA 30056-57	2 May, 1979
AG 1-14	YA 30058-71	2 May, 1979

These claims form a rectangular contiguous block on the north-west of Mt. Haldane, some 30 km. north of Mayo. A claim sketch is attached.

The work outlined in this report was conducted by CCH Resources Ltd., a wholly-owned subsidiary of Campbell Chibougamau Mines Ltd. The geochemical samples were taken from 15th. to 17th. of August, 1978 as part of the Cortin Join Venture's exploration program.

EXPLORATION HISTORY

Lead-silver mineralization was discovered in Bighorn Gulch early in the Yukon's exploration history,

perhaps even prior to the Galena Hill discoveries of 1903. The mineralization, referred to as the Mt. Haldane System, is in a complex zone of Transverse-type vein-faults, formed under tension and subsequently displaced by post-mineral movement. This vein system has been explored with some 700m of drifting plus some raising and underground drilling in two main periods, between 1918 and 1920 by Yukon Silver-Lead Mining Co. Ltd. and from 1964 to 1967 by Silver Titan Mines Ltd.

In 1977 CCH Resources Ltd. discovered tin and tungsten mineralization on the south-east flank of Mt. Haldane on the Joubira claim group. While sampling the remaining gulches that drain the mountain, marginally enhanced tin and tungsten values were found in Bighorn Gulch below the Pb-Ag workings.

The purpose of the work outlined in this report was to ascertain whether or not there was any evidence to link the tin-tungsten mineralization to the lead-silver vein system. Two of the questions asked in this regard were:

a) Were the two mineralizing events contemporaneous, both products of the same genetic system, or were they separate in time, space and generation?

b) If a zonal arrangement could be seen, what possibilities were there for the discovery of tin-tungsten mineralization flanking known lead-silver occurrences, or perhaps at depth below Pb-Ag systems?

#### GENERAL GEOLOGY

Immediately to the south-east on the Joubira claims the Keno Hill Quartzite of (?) Lower Cretaceous age

is intruded by sills and lenses of "greenstone". Later quartz-biotite porphyry intrusions, in the form of dykes, sills and possibly a small stock or plug, cut both the quartzites and the greenstones. Several stages of quartz veining occur in the area, and quartz-greisen veining with typical greisen type alteration is commonly associated with the Q.B.P. intrusives.

The Keno Hill quartzite continues over the Pb and Ag claims where they are cut by the Mt. Haldane vein system which strikes northerly and dips westerly with a right-hand displacement of between 500 and 2000m.

Both mineralized Transverse Vein-faults and an unmineralized Cross-fault (Ewing Fault) have been recognized in the vein system, which displays features common to both types of structures elsewhere in the district. The Mt. Haldane showings are basically similar to the major Keno Hill deposits. The mineralogy consists of silver-rich galena with lesser sphalerite in a siderite gangue, while the ratio between ounces per ton silver and per cent lead ranges from 1.2:1 to 6.2:1 and is occasionally more than 10:1, also normal for the district. Mineralization has been found on surface over a strike length of at least 1200m and through a vertical range of about 300m.

. No quartz-biotite-porphyry intrusions have been seen on the Pb-Ag claims.

#### GEOCHEMICAL METHODS

Two scree-fine sample lines were run across the

talus slopes either side of Bighorn Gulch. This sampling method has been successfully used by CCH Resources to locate and trace tin-tungsten soil or scree-fine anomalies. The locations of the lines midway between the Joubira group Sn-W areas and the Bighorn Gulch Pb-Ag vein system were chosen to reveal any tie-up between the two mineral systems.

The -80 mesh fraction of all samples was analyzed for Sn, W, Cu, Pb, Zn, Ag, Mo and As by Boundar-Clegg's laboratories in Whitehorse, Vancouver and Ottawa.

#### GEOCHEMICAL RESULTS

The results are shown below, and the sample locations are plotted on the attached map.

The few weakly-anomalous Sn-W values show that there is no obvious tie-up between the Sn-W and Pb-Ag systems.

Cu anomalies are frequent all over the mountain, ~~are~~ are generally of erratic distribution. Those encountered on the two reconnaissance lines are no exception.

Pb-Ag values show the known north-south extensions of the Mt. Haldane Pb-Ag system as would be expected.

Zn values are very low; a further indication that Sn-W mineralization is absent, since the three elements exhibit excellent correlation.

Mo values near the south-east end of the more northerly line suggest a geochemical enhancement of this

RECONNAISSANCE GEOCHEMISTRY

Pb, Ag, Jo, John, Middlecoff, Lowell, etc. Claims

NTS REF. 105-M-13

No.	Sn	W	Cu	Pb	Zn	Ag	Mo	As
3176	8	10	28	35	60	1.2	2	700
7	12	L2	8	13	20	2.2	5	200
8	8	L2	23	16	90	0.4	3	134
9	8	18	36	17	46	0.8	2	510
3180	ND	7	30	17	70	1.6	2	620
1	3	2	22	15	60	1.2	6	170
2	3	3	90	21	160	1.1	12	225
3	ND	L2	20	12	51	0.6	4	480
4	9	2	18	10	30	0.2	5	290
5	1	6	40	18	97	0.6	5	180
6	2	6	35	20	79	1.0	4	180
7	8	2	25	10	66	1.5	2	195
8	7	6	36	15	65	0.7	4	240
9	4	8	20	18	23	2.0	3	240
3190	7	10	45	47	120	0.6	5	750
1	3	6	29	18	74	0.3	2	189
2	5	6	54	15	81	0.6	1	165
3	ND	3	120	18	112	0.3	1	153
4	10	L2	80	10	98	1.2	2	120
5	4	3	140	8	200	0.9	2	210
6	6	3	62	40	175	0.4	5	680
7	2	3	59	13	80	1.0	2	720
8	5	I.S.	21	6	32	0.1	2	160

RECONNAISSANCE GEOCHEMISTRY

Pb, Ag, Jo, John, Middlecoff, Lowell, etc. Claims

NTS REF. 105-M-13

No.	Sn	W	Cu	Pb	Zn	Ag	Mo	As
3199	2	L2	30	9	110	0.4	1	60
3500	ND	3	21	9	52	0.2	2	88
1	ND	L2	26	2	90	0.2	1	12
2	5	L2	63	40	68	0.4	2	53
3	8	3	250	15	55	0.2	2	110
4	12	3	36	5	150	0.2	ND	34
5	10	2	60	10	28	ND	1	31
6	10	L2	10	5	45	0.2	3	50
7	13	L2	17	13	50	0.3	1	57
8	7	L2	17	9	70	0.3	2	51
9	9	L2	17	11	64	0.3	2	53
3510	11	L2	5	10	20	0.3	2	34
1	8	L2	7	8	12	0.1	2	10
2	6	L2	23	15	90	5.8	1	32
3	9	L2	31	28	60	0.3	2	38
4	3	L2	37	18	110	0.4	2	30
5	3	L2	90	25	60	0.6	1	31
6	4	L2	59	13	115	1.0	1	27
7	11	L2	32	13	42	0.4	1	32
8	9	L2	28	80	100	0.5	2	49
9	8	L2	52	880	550	3.6	1	52
3520	8	L2	17	350	350	1.4	2	43
1	9	L2	16	78	130	0.8	2	50

RECONNAISSANCE GEOCHEMISTRY

Pb, Ag, Jo, John, Middlecoff, Lowell, etc. Claims

NTS REF. 105-M-13

No.	Sn	W	Cu	Pb	Zn	Ag	Mo	As
3522	7	3	22	29	195	0.3	ND	51
3523	3	7	58	65	150	0.8	2	61
4	7	L2	4	5	30	ND	1	12
5	1	L2	6	5	20	0.9	2	29
6	9	L2	15	10	30	0.4	2	40
7	3	L2	40	8	80	0.4	1	42
8	ND	L2	85	6	60	0.3	2	29
9	5	2	23	5	40	ND	2	41
3530	5	L2	51	5	90	0.3	1	17
1	7	L2	55	5	50	0.4	2	31
2	4	L2	17	3	50	1.4	2	6
3	6	L2	26	6	45	ND	2	31
4	8	L2	25	4	50	ND	2	28
5	5	L2	14	8	30	0.1	2	38
6	6	L2	37	10	60	0.2	2	20
7	3	6	75	5	85	0.1	1	30
8	9	L2	120	68	70	1.0	2	23
9	11	L2	10	10	30	0.2	1	12
3540	8	L2	3	3	20	0.4	2	10
1	9	L2	190	10	70	0.3	2	50
2	11	L2	25	10	40	0.2	1	51
3	4	3	67	5	70	0.5	1	7
4	9	L2	28	5	25	0.3	1	9

RECONNAISSANCE GEOCHEMISTRYPb, Ag, Jo, John, Middlecoff, Lowell, etc. ClaimsNTS REF. 105-M-13

No.	Sn	W	Cu	Pb	Zn	Ag	Mo	As
3545	9	38	160	3	85	0.3	2	40
6	9	38	115	10	60	0.8	2	51
7	9	24	30	71	70	0.6	4	580
8	5	10	35	18	80	0.3	3	750
9	8	L2	55	15	110	0.3	4	67
3550	10	L2	36	20	110	0.5	4	165
1	12	L2	30	14	55	0.4	5	165
2	8	2	50	33	135	0.6	3	520
3	ND	2	17	5	80	0.6	2	67
4	10	14	40	16	78	0.4	2	165
5	11	L2	50	14	80	0.4	2	110
6	6	L2	43	20	70	0.5	3	530
7	8	L2	25	15	70	0.3	3	189
8	5	2	29	9	75	0.2	2	510
9	6	L2	36	12	75	0.4	2	620
3560	6	2	30	10	50	0.7	1	540
1	19	2	16	330	165	24.0	1	170
2	5	L2	23	14	80	0.1	3	62
3	NO SAMPLE							
4	10	L2	20	16	50	0.2	1	48
5	8	L2	25	14	50	0.3	1	12
6	5	L2	36	31	180	0.4	3	175
7	7	L2	45	8	25	0.3	2	48



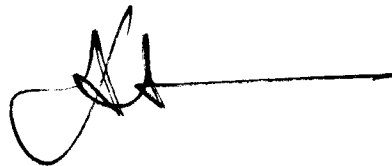
element peripheral to the Joumbira Sn-W area.

As values form a circular pattern centered on the Q.B.P. intrusions in Fortune Creek.

RECOMMENDATIONS

From this limited geochemical survey it can be seen that there is no obvious surface expression of any direct link between the Pb-Ag mineralization in Bighorn Gulch and the Sn-W mineralization in Fortune Creek.

In this light any further work on the Pb, Ag, etc. claims should be directed toward the Pb-Ag vein systems. However, routine analysis for Sn-W should be an integral part of further work, and the presence of tin-tungsten mineralization on surface or at depth in the workings cannot be discounted.

A handwritten signature in black ink, consisting of a stylized, cursive name followed by a horizontal line extending to the right.

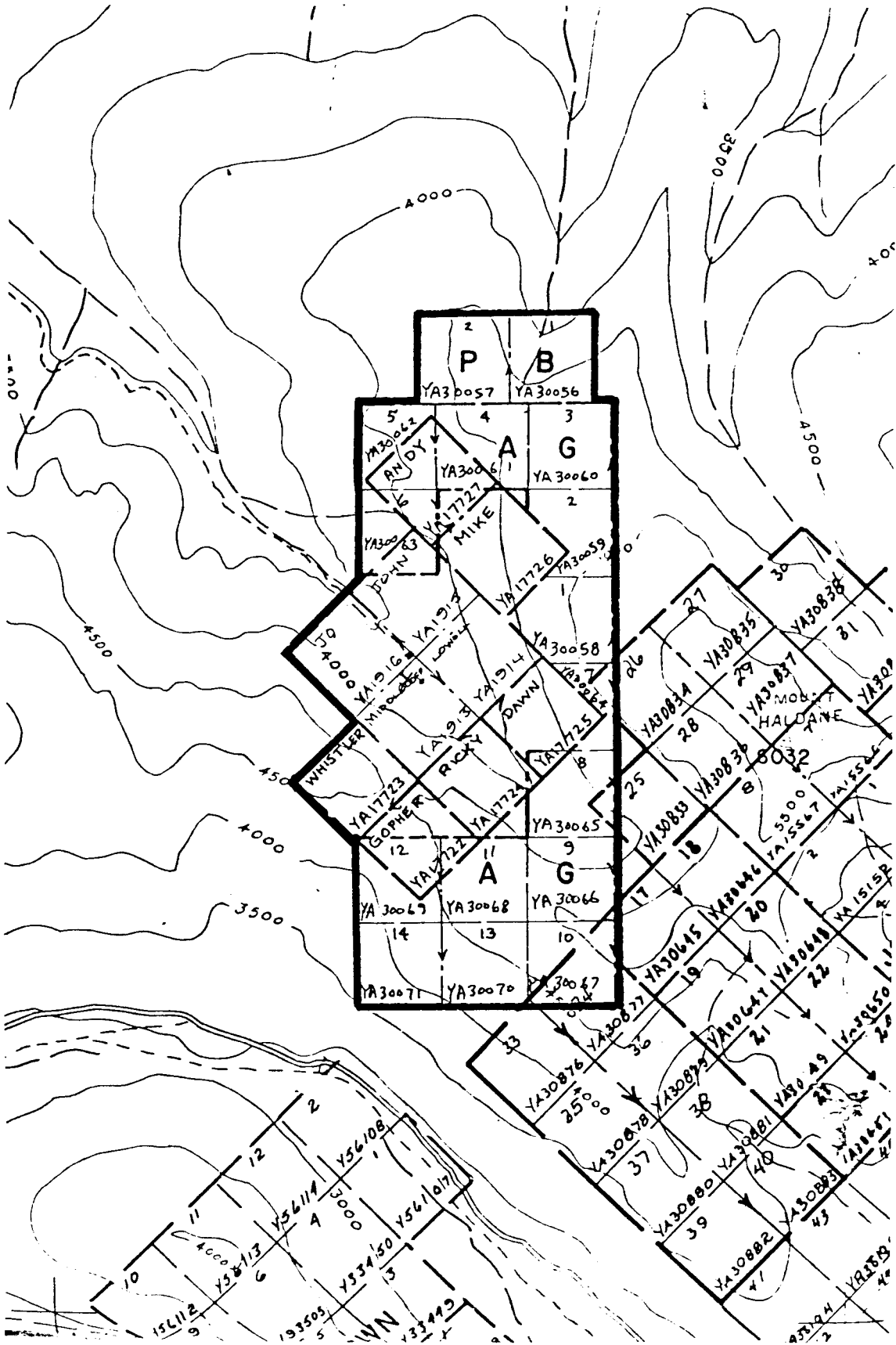
Angus Woodsend  
Senior Geologist

Vancouver,  
March 28, 1979

CLAIM LOCATION SKETCH

Pb, Ag, Jo, John, Middlecoff, etc.

SCALE 1" = 1/2 MILE



CCH RESOURCES

105-M-13

PB, AG, JO, JOHN, MIDDLECOFF  
LOWELL ETC.

RECONNAISSANCE GEOCHEM.

SCALE 1:10,000

MAR '79.



Sh.